

REMARKS

In response to the above-identified Office Action, applicant has provided hereinabove amendments to claims 15 – 18 and 26 in order to overcome claim objections by the Examiner. The Examiner is correct that claim 15 was intended to depend from claim 12 and has now been amended to do so. Antecedence has been corrected. The Examiner is also correct that the terminology “tubular member” in claims 16-18 was inappropriate in view of the antecedent basis “tubular sleeve” within claim 29 from which they depend. None of these amendments narrow the scope of the claims amended.

The Examiner has rejected claims 12-17, 19 - 23 and 25-29 under 35 U.S.C. §102(b) for being anticipated by Williamson et al., U.S. 5,613,559. In the first two lines of the Examiner’s reasoning as to why the reference supports the rejection, the Examiner takes inconsistent positions. First, the Examiner points to a non-diverter tubular sleeve 110. This numeral is a general designation for the decentralizer as taught in Williamson et al, which decentralizer comprises many components. Second, the Examiner indicates that the “tubular sleeve” 110 is “composed” (closed terminology) of a single piece of material 118. These two positions are clearly incongruous since a single piece of material component cannot also be a multiple piece of material component. Because of this inconsistency, the rejection appears to be based upon a foundation not in fact illustrated in the reference. Applicants therefore respectfully request withdrawal of the rejection.

Moreover, there is no specific indication in Williamson et al. that the wall thickness of the sleeve 118 (cited by the Examiner) is selected to minimize restriction in the well. Rather, there is ample reason to believe that the disclosure of Williamson et al. will size sleeve 118 with respect to thickness solely in order to ensure that it can do the job it was intended to do. That job is expressed by Williamson et al. as follows: “...the diverter 130 moves downwardly under the mass of the drill string, moving the first and second tubular members 116, 118 axially with respect to one another *against the packer 120. This urges* the decentralizing rings 112, 114 onto the eccentric ramp 115, thereby setting the decentralizer 110.” (emphasis added). It is quite clear from this passage (at column 12 lines 26 – 32) that both of the sleeves 116 and 118 are intended to carry the entire mass of the drill string and transmit that mass to the decentralizing rings to force them onto the eccentric ramp. Unequivocally then these sleeves cannot be made to maintain patency of the borehole but rather must be made to take a substantial load without

deforming. Minimizing restriction in the wellbore would be counterproductive for the Williamson et al teaching. There is no teaching in the reference that is even remotely related to the problem that Applicants are solving and therefore no reason to even try to reduce the thickness of the sleeve, not to mention that from an engineering standpoint, load carrying capacity is the only thing that would have been considered in Williamson et al. That being said, how can Williamson et al possibly teach one of ordinary skill in the art the invention claimed by Applicants herein? It is also noted that the reference also cannot render the invention obvious for lack of any teaching of relevance thereto.

It is noted that the Examiner cites to column 12, lines 17-32 indicating that Williamson et al. discloses the thickness being insufficient to divert a tool. There is no teaching within line 17-32 regarding an insufficiency of the device to divert a tool, nor as stated above is there any teaching whatsoever regarding minimizing restriction within a borehole.

Further, the Examiner alleges that Williamson et al. discloses an expandable section 112, 114. Applicant would like to point out that 112 and 114 are first and second decentralizing rings whose purpose it is to ensure that the diverter 130 is decentralized within the well flow conductor 100 so that the diverter 130 may serve its intended purpose. It is perfectly obvious to one of ordinary skill in the art that decentralizing rings 112, 114 must be of significant strength in order to maintain the diverter 130 in the intended position. These rings therefore cannot be expanded. Further, the disclosure of Williamson et al. is that decentralizing rings 112 and 114 cooperate with an eccentric ramp 115. Urging the rings onto ramp 115 does not change their circumferential dimension, a feature that is claimed in the present application, but rather pushes them off center with respect to the axis of the tool so that the diverter becomes decentralized. There is no teaching within this reference of any portion thereof assuming a radially expandable, larger circumferential dimension.

With respect to the Examiner's comment that Williamson et al. discloses an orientation profile 128, 410 disposed at an axial end of the sleeve, it is pointed out that the orientation subsystem 300 taught within the reference is not at the end of the sleeve, it is actually part of another component of the decentralizer 110. The claims at issue require an orientation profile on the sleeve, which is a single piece of material.

The Examiner states with respect to claim 12 that Williamson et al. discloses an orientation profile 128 having an orientation opening, that opening being the bore of 118, which

is illustrated in drawings but not discussed. It is quite clear that those bores in sleeve 118 do not have effect or any connection to orientation of the device or the orientation profile. It is the *orientation profile* of the present claims that includes an orientation opening. This is not the case in Williamson et al.

With respect to claims 13 and 14, the assertions are incorrect. The orientation slot 410 the Examiner refers to is located on the inner honed bore of the packer 120 and is not related to sleeve 118, which the Examiner has utilized earlier in this rejection. With respect to claim 16 the Examiner states the tubular sleeve is anchorable within the wellbore via decentralizing rings 112 and 114. Applicants reiterate that the purpose of the decentralizing rings 112 and 114 is to push the diverter 130 off axis relative to the wellbore. This can be seen in the difference in Figures 1A to 1B of the device 110 relative to the borehole 100. More specifically, please note the area between device 110 and borehole 100 just below the lead lines in numeral 113. That area is smaller in Figure 1B because the decentralizer ring 112 is coming into contact with the opposite edge of wellbore 100 (please see numeral 112). Also, note that numeral 112 is a ring and does not touch the wall of the wellbore 100 on the left side of the figure nor is it riding significantly up the ramp 115 on the left side of the drawings since ramp 115 does not exist on the left side of the drawing. It should be understood therefore that decentralizing rings 112 and 114 do not anchor anything within the wellbore but merely force the diverter 130 in one direction. There is therefore no teaching within Williamson et al. to make the sleeve anchorable. Also noted is that sleeve 118 is not anchored as would need to be the case in order for sleeve 118 to anticipate the claims in the present application.

The Examiner, with reference to claim 17, again suggests that 112 and 114 are radially expandable. They are not in fact radially expandable, they simply move sideways. Applicant believes this is clear from the statements hereinabove.

With respect to claim 19 there is no teaching within the reference to provide a single piece of material sleeve that is a non-diverter sleeve having an orientation profile and slot. The fact that several of the operable features of the invention could be embodied in several different components of the prior art does not render the present invention unpatentable because there is no teaching in the prior art that a single piece of material should have a thickness selected to minimize reduction in bore hole area, should include a non-diverter orientation profile and be anchorable within the hole. The Examiner is utilizing many different components of a device

having many components therein to attempt to supportably reject a claim device having a single component. This simply is not taught within the reference.

With respect to claim 25 the Examiner states Williamson et al. discloses the uphole end of the tubular member having an orientation profile configured to cause a pin 310, 360 on a separate tool to ride along the orientation profile. The pin is not on the separate tool within Williamson et al. the orientation profile is within a packer in Williamson et al., there is no orientation profile at the upper end of the tubular sleeve in Williamson et al. and particularly not the identified tubular sleeve that the Examiner chooses to rely upon, numeral 118.

The Examiner relies upon Braddick to reject claim 30 alleging that Braddick teaches that the sleeve includes a circumferentially expandable section. Braddick teaches a common slip setup, which is used to anchor his orientation device. It is the slip that might be said to have a circumferential measurement, which is larger after setting. There is no disclosure within Braddick however of the sleeve itself having a larger circumferential measurement. The sleeve in fact does not have a larger circumferential measurement. This distinction has been emphasized by amendment of claim 30 to make more clear that the sleeve is but a single piece of material, which material is itself expanded to increase the circumferential measurement thereof. Applicant therefore respectfully requests withdrawal of the rejection.

The balance of the Examiner's rejections appear to reiterate positions taken by the Examiner earlier in the Office Action and have been addressed by Applicant. Applicant again notes that nowhere in the reference is a non-diverter tubular sleeve composed of a single piece of material that minimizes restriction in the borehole, that includes an orientation profile disposed at an axial end of that sleeve and an expandable section of the sleeve being radially expandable to assume a larger circumferential dimension. Each of the elements of this orientation device is embodied in a single piece of material. No prior art including that to Williamson et al. teaches such a device.

It is noted with appreciation that the Examiner has indicated that claim 18 contains allowable subject matter. Claim 18 has been amended to exist in independent form. Applicants therefore anticipate that the claim will be allowed in the next office action.

Applicant respectfully requests reconsideration of the rejection and early allowance of all of the claims in the present application.

In the event the Examiner has any queries regarding the instantly submitted Amendment,

Applicant's attorney respectfully requests the courtesy of a telephone conference to discuss any matters in need of attention.

In the event that there are any fees due with respect to this Response, Applicant's attorney respectfully requests that such fees be withdrawn from Deposit Account No. 02-0429 maintained by Applicants' assignee.

Respectfully submitted,

CANTOR COLBURN LLP

By: 

Keith J. Murphy
Registration No. 33,979
55 Griffin Road South
Bloomfield, CT 06002
Telephone: (860) 286-2929
Facsimile (860) 286-0115
Customer No. 23413

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